

INDEX TO VOLUME 102

COMPILED BY LISA D. BRUSH AND K. ELIZABETH K. PACALA

This index is primarily one to new information. Previously published information referred to in this volume has not been indexed unless extensive comparisons or reinterpretations are involved. For some species, especially ones not in the A.O.U. Check-list, only scientific names have been entered, and, in some instances, entries under scientific names are more extensive than those under vernacular names. New generic, specific, and subspecific names are printed in boldface type.

- Abele, Lawrence G., see Strong, Donald R., Jr., et al.
Accipitridae, 556-573
Ackerman, Ralph A., see Davis, Thomas A., and —
Aechmophorus occidentalis, 102-118
Aethia cristatella, 520-537
A. psittacula, 520-537
A. pusilla, 520-537
A. pygmaea, 520-537
Age, determination of, 103, 106, 508
Agelaius phoeniceus, 205-208, 298-304, 637-639, 900, 901-902
A. tricolor, 882-883
Ainley, David G., Edmund F. O'Connor, and Robert J. Boekelheide, The marine ecology of birds in the Ross Sea, Antarctica (rev.), 220-221
Ainley, Marianne Gosztonyi, review by, 914-915
Alaska, 82-94, 362-367, 414-416, 645
Albatross, Black-browed, 540-548
Alca impennis, 520-537
A. torda, 293-296, 520-537
Aldrich, John W., Ecogeographical variation in size and proportions of Song Sparrows (*Melospiza melodia*) (rev.), 913-914
Ali, Salim, and Robert B. Grubb, Ecological study of bird hazards at Indian aerodromes. Phase II, Delhi, Bombay, Hindan (rev.), 679; and S. Dillon Ripley, A pictorial guide to the birds of the Indian subcontinent (rev.), 240
Alisauskas, Ray T., and C. Davison Ankney, Nutrient reserves and the energetics of reproduction in American Coots, 133-143
Allaby, Michael, Dictionary of the environment (rev.), 228-229
Alle alle, 520-537
Altruism (see Communal breeding)
Alvarenga, Herculano M. F., see Teixeira, Dante Martins, and —
Amadon, Dean, review by, 218-219
Amazona finschi, 873
Amblyornis macgregoriae, 334-341
American Ornithologists' Union, Awards, 242-244; Proceedings of the One-Hundred-Second Stated Meeting, 1AA-30AA; Thirty-fifth supplement to the Check-list of North American Birds, 680-686
Amphispiza belli, 500-505
Anas discors, 354-360
A. platyrhynchos, 459-467
A. schneideri, 201-204
A. superciliosa, 459-467
Anatomical specimens, 587-595
Anatomy and morphology of *Agelaius tricolor*, 882-883; Alcidae, 293-296, 520-537; *Anas platyrhynchos*, 459-467; *A. superciliosa*, 459-467; *Balaeniceps rex*, 845-849; *Branta canadensis*, 195-198; *Cistothorus palustris*, 439-444; *Coturnis japonica*, 323-332; *Diomedea irrorata*, 839, 840; *Fregata minor*, 838, 839; *Heliangelus exortis*, 704-710; *Junco hyemalis*, 818-819; *Larus delawarensis*, 875; Pelecaniformes, 836-848; *Phaethon rubricauda*, 838, 840; Trochilidae, 251-262; *Wilsonia citrina*, 717-718
Anderson, John G. T., see Heppner, Frank H., et al.
Anhingidae, 834-851
Ankney, C. Davison, see Alisauskas, Ray T., and —; see Quinney, Terry E., and —
Anous minutus, 172-174
Antarctica, 540-548
Apel, Karen M., see Ficken, Millicent S., et al.
Aramus guarauna, 170-171
Aratinga canicularis, 873
Arbib, Robert S., Jr., review by, 233-234
Archichthys colubris, 722-725
Ardea herodias, 49-61
Arendt, Wayne J., *Philornis ectoparasitism of Pearly-eyed Thrashers. I. Impact on growth and development of nestlings*, 270-280; II. Effects on adults and reproduction, 281-291
Arizona, 120-130
Arthur, Wallace, Mechanisms of morphological evolution. A combined genetic, developmental, and ecological approach (rev.), 667-668
Ashmole, N. Philip, review by, 220-221
Ashmole's hypothesis, 632-634
Asio otus, 193-195
Astheimer, Lee B., Long laying intervals: a possible mechanism and its implications, 401-409
Auk, Great, 520-537
Auklet, Cassin's, 520-537; Crested, 520-537; Least, 520-537; Parakeet, 520-537; Rhinoceros, 520-537; Whiskered, 520-537
Auriparus flaviceps, 120-130
Austin, Oliver L., Jr., In memoriam: Charles Henry Blake, 159-161
Baerends, G. P., and R. H. Drent (Eds.), *The Herring Gull and its egg. Part II, The responsiveness to*

- egg-features (rev.),** 213-214
Balaeniceps rex, 845-849, 850
Balph, David F., review by, 423-424
Balthazart, J., E. Pröve, and R. Gilles (Eds.), Hormones and behavior in higher vertebrates (rev.), 219-220
Bancroft, G. Thomas, Nutrient content of eggs and the energetics of clutch formation in the Boat-tailed Grackle, 43-47
Banks, Richard C., see Clapp, Roger B., et al.; review by, 677-678
Bannerman, David A., and W. Mary Bannerman, The birds of the Balearics (rev.), 236-237
Bannerman, W. Mary, see Bannerman, David A., and —
Baptista, Luis F., review by, 432-433
Beaman, M., see Jonsson, L.
Beecher, Michael D., Philip K. Stoddard, and Patricia Loesche, Recognition of parents' voices by young Cliff Swallows, 600-605
Behavior, activity patterns, 493-498, 580-585, 796-803; agonistic, 313-321; altruistic (see Communal breeding); antipredator, 506-518, 889-891; breeding, 16-23, 25-36, 38-41, 46, 49-61, 64-79, 133-143, 167-170, 187-190, 198-201, 205-208, 210-211, 305-311, 334-341, 354-360, 385-386, 410-412, 479-490, 550-554, 621-626, 651-653, 654-657, 687-693, 696-700, 870-871, 874-877; brood division, 687-693, 890-891; dominance, 719-720, 814-815, 900, 901-902; effect of environment on, 754-764; feeding, 25-36, 46, 97-101, 120-130, 133-143, 187-190, 193-195, 245-249, 334-341, 384, 417-418, 479-490, 540-548, 552, 580-585, 613-619, 693, 708-710, 717-718, 722-725, 793-803, 820-825, 872-874, 884-885, 890-891; feeding aggregation, 886-888; flight, 97-101, 102-118, 195-198, 384-385, 738-742; food-begging, 783; foraging (see Behavior, feeding); homosexual, 874-877; incubation, 25-36, 53, 696-700, 790, 832; interspecific, 744-748, 758-759; learning, 600-605, 854-860; maintenance, 893-894; mate replacement, 16-23, 389-390, 410-412; mating preference, 343-345, 389-390, 410-412, 550-554, 693; movements in home range, 690, 793-803, 890; nest helper (see Communal breeding); nesting, 774-778, 880-881; nest-site tenacity, 16-23, 389, 506-518, 830, 832-833; ontogeny of, 870-871; pair, 880, 894; parental care, 687-693, 890-891; roosting, 793-803, 886-888, 900, 901-902; sexual differences in, 16-23, 198-201, 334-341, 391-392, 714-720, 878-881; site fidelity, 16-23, 506-518, 768, 797-802, 810-813; social, 754-764, 766-772, 793-803, 854-860, 894; territorial, 313-321, 384, 410-412, 500-505, 506-518, 651-653, 724, 758-759; thermoregulatory, 25-36; vocal, 744-748, 854-860, 879-881
Behavior of Agelaius phoeniceus, 900, 901-902; *Archilochus colubris*, 722-725; *Bulweria bulwerii*, 879-881; *Buteo platypterus*, 738-742; *Calcarius lapponicus*, 687-693; *Calidris pusilla*, 16-23; *Coccyzus erythrophthalmus*, 889-891; *Columba livia*, 886-888; *Dendragapus obscurus*, 313-321; *Dendroica coronata*, 820-825; *Dolichonyx oryzivorus*, 550-554; *Empidonax oberholseri*, 25-36; *Eudyptes chrysocome*, 893-894; *E. chrysolophus*, 893-894; *Junco hyemalis*, 810-815; *Lanius collaris*, 754-764; *L. excubitorius*, 754-764, 766-772; *Larus argentatus*, 827-833; *L. californicus*, 696-700; *L. delawarensis*, 38-41, 696-700, 827-833, 874-875; *Orthorhynchus cristatus*, 722-725; *Parus major*, 870-871; *Sturnus vulgaris*, 793-803; *Trogon citreolus*, 872-874; *Wilsonia citrina*, 714-720
Belgium, 870-871
Belize, 170-171
Bergerud, A. T., and H. E. Butler, Aggressive and spacing behavior of female Blue Grouse, 313-321
Best, Louis B., see Westmoreland, David, and —
Bezzel, Einhard, Vögel in der Kulturlandschaft (rev.), 239-240
Bittern, Cory's, 413; Least, 413
Black, J., see De Vries, T., et al.
Blackbird, Red-winged, 205-208, 298-304, 637-639, 900, 901-902; Tricolored, 882-883
Black-Hawk, Great, 508
Blake, Barry F., see Tasker, Mark L., et al.
Blancher, Peter J., and Raleigh J. Robertson, Predation in relation to spacing of kingbird nests, 654-657
Bleiweiss, Robert, Iridescent polychromatism in a female hummingbird: is it related to feeding strategies, 701-713
Bluebird, Mountain, 191-192
Bobolink, 550-554
Bock, Carl E., see Price, Frank E., and —
Bodio, Stephen, A rage for falcons (rev.), 678-679
Boehme, R. L., see Flint, V. E., et al.
Boekelheide, Robert J., see Ainley, David G., et al.
Bohlen, H. David, review by, 216-217
Boise, Cheryl M., see Krapu, Gary L., et al.
Bollinger, Eric K., see Gavin, Thomas A., and —
Borneo, 606-612
Bourne, W. R. P., review by, 435-436
Bourso-Leland, Natalia, see Flint, V. E., et al.
Bowerbird, MacGregor's, 334-341
Bowers, Michael A., see Brown, James H., and —
Boyce, Mark S., and Richard S. Miller, Ten-year periodicity in Whooping Crane census, 658-660
Brachyrhampus brevirostris, 520-537
B. marmoratus, 520-537
Bradley, David W., The effects of visibility bias on time-budget estimates of niche breadth and overlap, 493-498
Brant, 645-647
Branta bernicla, 645-647
B. canadensis, 195-198
Braun, Clait E., see Dunn, Peter O., and —
Breeding (see also Behavior, breeding; Breeding success; Clutch size; Eggs; Incubation and incuba-

- tion period; Nest and nest site), effects of interference on, 38-41, 167-170, 774-778
- Breeding success, 1-13, 16-23, 25-36, 38-41, 49-61, 133-143, 198-201, 362-367, 447-456, 654-657, 690-693, 760-761, 769-770, 774-778, 786, 827-833, 870-871
- Breeding success of *Ardea herodias*, 49-61; *Calcarus lapponicus*, 690-693; *Calidris pusilla*, 16-23; *Camerarius albus*, 49-61; *Dolichonyx oryzivorus*, 550-554; *Empidonax oberholseri*, 25-36; *Fulica americana*, 133-143; *Hirundo pyrrhonota*, 167-170; *Lanius collaris*, 760-761; *L. excubitorius*, 760-761, 769-770; *Larus argentatus*, 827-833; *L. delawarensis*, 38-41, 827-833; *Parus caeruleus*, 470-477; *P. major*, 870-871; *Sphyrapicus nuchalis*, 1-13; *S. ruber*, 1-13; *Tyrannus verticalis*, 654-657; *T. vociferans*, 654-657; *Uria lomvia*, 447-456; *Zenaidura macroura*, 774-778; *Zonotrichia leucophrys*, 786
- Breit, Viola, and others, Ornithology books in the library of Trinity College, Hartford: including the library of Ostrom Enders (rev.), 224-225
- Breucker, Haide, Seasonal spermatogenesis in the Mute Swan (*Cygnus olor*) (rev.), 678
- Briggs, S. V., Commentary: Patterns of egg-laying in prairie ducks, 896-897
- Brisbin, I. Lehr, Jr., review by, 908-909
- British Columbia, 181-183, 198-201
- Brodhead, Michael J., review by, 904-905
- Brooke, M. de L., The effect of allopreening on tick burdens of molting eudyptid penguins, 893-895
- Brown, James H., and Michael A. Bowers, Community organization in hummingbirds: relationships between morphology and ecology, 251-269
- Browne, Janet, The secular ark. Studies in the history of biogeography (rev.), 215-216
- Brush, Alan H., editorial, 903; reviews by, 438, 679, 919-920; and George A. Clark, Jr. (Eds.), Perspectives in ornithology (rev.), 217-218
- Buccinidae, 553-573
- Bucephala islandica, 389-390
- Bulweria bulwerii, 172-174, 878-881
- Burger, Joanna, review by, 906-907
- Burley, Nancy, Leg-band color and mortality patterns in captive breeding populations of Zebra Finches, 647-650
- Burnell, Kristi L., and Diana F. Tombach, Steller's Jays steal Gray Jay caches: field and laboratory observations, 417-418
- Burnham, William A., and William E. Mattox, Biology of the Peregrine and Gyrfalcon in Greenland (rev.), 669-670
- Bushtit, 120-130
- Buteo jamaicensis, 638
- B. platypterus, 735-742
- Buteogallus urubitinga, 508-515
- Butler, H. E., see Bergerud, A. T., and —
- Byers, Steven M., review by, 221-222
- Caccamise, Donald F., see Morrison, Douglas W., and
- Cacicus cela*, 506-518
- C. melanicterus*, 873, 874
- Cacicue, Yellow-rumped, 506-518; Yellow-winged, 873, 874
- Calcarus lapponicus*, 687-693
- Calder, William A., III, Size, function and life history (rev.), 434-435
- Calidris alba*, 580-585
- C. pusilla*, 16-23
- California, 1-13, 25-36, 49-61, 102-118, 179-180, 305-311, 439-444, 493-498, 580-585, 635-637, 781-790, 882-883
- Calls (see Vocalizations)
- Campbell, Bruce, and Elizabeth Lack (Eds.), A dictionary of birds (rev.), 907-908
- Canada, 102-118
- Canady, Richard A., see Kroodsma, Donald E., and
-
- Capitonidae, 553-573
- Caprimulgidae, 556-573
- Caracara, Black, 508; Crested, 638
- Cardellina rubrifrons*, 120-130
- Carduelis flammea*, 82-94
- C. hornemannii*, 82-94
- C. pinus*, 153
- C. tristis*, 153
- Carib, Green-throated, 723-724
- Caribbean, 163-166
- Carpodacus mexicanus*, 153, 643-644
- Case, Ted J., and Martin L. Cody (Eds.), Island biogeography in the Sea of Cortéz (rev.), 225-226
- Casmerodus albus*, 49-61
- Census methods, 493-498, 658-660, 897-898, 899
- Centrocercus urophasianus*, 621-626
- Cephus carbo*, 520-537
- C. columba*, 520-537
- C. grylle*, 293-296, 520-537
- Cerorhinca monocerata*, 520-537
- Chachalaca, Wagler's, 873, 874
- Chaetura peligra*, 387-388
- Charadrius alexandrinus*, 347-352
- Charig, Alan, A new look at the dinosaurs (rev.), 920
- Chickadee, Black-capped, 145-150, 184-186
- Chilgren, John D., Carbon, nitrogen, ash, and caloric density of the lean dry body mass of White-crowned Sparrows during postnuptial molt, 414-416
- Chlidonias niger*, 640-642
- Choate, Ernest A., The dictionary of American bird names (rev.), 920
- Christidis, L., A rapid procedure for obtaining chromosome preparations from birds, 892-893
- Ciconiiformes, 844-845
- Circus cyaneus*, 637-639
- Cistothorus palustris*, 439-444
- Cladistics, 849-851
- Clapp, Roger B., Richard C. Banks, Deborah Morgan-Jacobs, and Wayne A. Hoffman, Marine birds of the southeastern United States and Gulf of Mex-

- ico. Part I, Gaviiformes through Pelecaniformes (rev.), 222-223; Deborah Morgan-Jacobs, and Richard Banks, Part II, Anseriformes, and Part III, Charadriiformes (rev.), 222-223
- Clark, George A., Jr., review by, 907-908; see Brush, Alan H., and —
- Cleptoparasitism (see Kleptoparasitism)
- Clunie, Fergus, Birds of the Fiji bush (rev.), 920
- Clutch size of *Anas discors*, 354-360; *Ardea herodias*, 49-61; *Casmerodus albus*, 49-62; *Larus argentatus*, 832; *L. californicus*, 698-699; *L. delawarensis*, 698-699, 830; *Quiscalus major*, 43-47
- Coccyzus erythrophthalmus*, 889-891
- Cody, Martin L., see Case, Ted J., and —
- Cohen, Robert R., see Hayes, David J., et al.
- Collias, Elsie C., see Collias, Nicholas E., and —
- Collias, Nicholas E., and Elsie C. Collias, Nest building and bird behavior (rev.), 668-669
- Collopy, Michael W., review by, 669-670
- Colombia, 701-710
- Colorado, 191-192, 417-418, 621-626
- Columba livia*, 886-888
- Columbidae, 556-573
- Commentaries, Counting seabirds at sea from ships: comments on interstudy comparisons and methodological standardization, see Haney, J. Christopher; Did Tree Swallows cross a polygyny threshold?, see Simmons, Robert; Dominance structuring of a Red-winged Blackbird roost: a comment, see Giroux, Jean-François; Patterns of egg-laying in prairie ducks, see Briggs, S. V.; Response to J. C. Haney, see Tasker, M. L., et al.; Response to J.-F. Giroux, see Weatherhead, Patrick J., and Drew J. Hoysak
- Communal breeding of *Lanius excubitorius*, 754-764, 766-772; *Sialia cinerea*, 191-192
- Conover, Michael R., Foreign objects in nests, 696-700
- Contopus virens*, 745-747
- Convissar, Jeffrey L., see Heppner, Frank H., et al.
- Cooke, Fred, see Gratto, Cheri L., et al.
- Cooperative breeding (see Communal breeding)
- Coot, American, 133-143
- Corvidae, 556-573
- Costa Rica, 97-101
- Cotingidae, 556-573
- Coturnix japonica*, 323-332
- Cracidae, 556-573
- Cracraft, Joel, Monophyly and phylogenetic relationships of the Pelecaniformes: a numerical cladistic analysis, 834-853; review by, 215-216
- Craig, Adrian J. F. K., and Alex H. Hartley, The arrangement and structure of feather melanin granules as a taxonomic character in African starlings (Sturnidae), 629-632
- Craig, E. H., see Craig, T. H., et al.
- Craig, T. H., E. H. Craig, and Leon R. Powers, Food habits of Long-eared Owls (*Asio otus*) at a communal roost site during the nesting season, 193-195
- Cramp, S., and K. E. L. Simmons (Eds.), Handbook of the birds of Europe, the Middle East and North Africa, vol. 3 (rev.), 428-429
- Crane, Sandhill, 362-367; Whooping, 658-660
- Cuckoo, Black-billed, 889-891
- Curlew, Long-billed, 174-175
- Cyanocitta stelleri*, 417-418
- Daptrius ater*, 508
- Davies, N. B., see Krebs, J. R., and —
- Davis, Thomas A., and Ralph A. Ackerman, Adaptations of Black Tern (*Chlidonias niger*) eggs for water loss in a moist nest, 640-642
- Dawson, Deanna K., see Noon, Barry R., et al.
- Dendragapus canadensis*, 393-394
- D. obscurus*, 180-183, 313-321
- Dendrocopidae, 556-573
- Dendroica coronata*, 120-130, 493-498, 820-825
- D. graciae*, 120-130
- D. nigrescens*, 120-130
- D. occidentalis*, 120-130
- D. petechia*, 120-130
- D. townsendi*, 120-130, 493-498
- De Solis, C., see De Vries, T., et al.
- De Vries, T., J. Black, C. De Solis, and C. Hernandez, Historia natural del Curiquinque *Phalcoboenus carunculatus* en los paramos (rev.), 678
- Dhondt, André A., Do old Great Tits forego breeding?, 870-872
- Diamond, Jared M., review by, 229-231
- Dicaeum aeruginosum*, 606-612
- D. agile*, 606-612
- D. everetti*, 606-612
- Dickerman, Carolyn, review by, 224-225
- Dinsmore, James J., Thomas H. Kent, Darwin Koenig, Peter C. Petersen, and Dean M. Roosa, Iowa birds (rev.), 216-217
- Diomedea irrorata*, 839, 840, 841
- Diseases and parasites of *Eudyptes chrysocome*, 893-894; *E. chrysolophus*, 893-894; *Margarops fuscatus*, 270-279, 281-291
- Distribution, altitudinal, 807-812, 814
- Distribution of *Branta bernicla*, 645-647; *Buteo platypterus*, 741-742; *Centrocercus urophasianus*, 621-626; *Junco hyemalis*, 807-812; *Puffinus puffinus*, 395-400; *Sphyrapicus nuchalis*, 12; *S. ruber*, 12
- Dixon, Tim J., see Tasker, Mark L., et al.
- Dolichonyx oryzivorus*, 550-554
- Douglas, Sheila, see Reimchen, T. E., and —
- Dove, Mourning, 774-778; Rock, 886-888
- Dovekie, 520-537
- Drent, R. H., see Baerends, G. P., and —
- Drury, William, review by, 428-429
- Duck, Grey, 459-467
- Duffy, David Cameron, reviews by, 420-421, 678
- Dunn, Peter O., and Clait E. Braun, Natal dispersal and lek fidelity of Sage Grouse, 621-626
- Dunning, John B., Jr., Body weights of 686 species of North American birds (rev.), 662

- Ecology, community structure, 808-809; competition, 723, 814-815, 880-881; demography, 760, 766-772; dispersal, 671-673, 689, 771-772, 796-797, 799; habitat partitioning, 635-637, 714-720, 754-765, 805-816; population structure, 717, 766-772, 886-888; predator-prey relationships, 506-518, 540-548, 637-639, 828-833; seasonal variation, 580-585, 805-816; territoriality, 716-717
- Ecology of *Aechmophorus occidentalis***, 117; *Archilochus colubris*, 722-725; *Emberizinae*, 152-157; *Lanius collaris*, 754-764; *L. excubitorius*, 754-764; *Orthorhynchus cristatus*, 722-725; *Trochilidae*, 251-262; *Wilsonia citrina*, 714-720
- Ectoparasitism (see Diseases and parasites)
- Ecuador, 701-710
- Editorial, 903
- Eggs, composition, 43-47; density, specific gravity, and volume, 750-752, 783, 788; laying, 49-61, 133-143, 298-304, 401-405, 483-490, 882-883, 896; physiology, 43-47, 640-642, 750-752; pipping, 750-752; temperature, 25-36, 750-751
- Eggs, descriptions and measurements, of *Empidonax oberholseri*, 26; *Larus californicus*, 698; *L. delawarensis*, 698; *Phaethon rubricauda*, 749-752; *Quiscalus major*, 43-47
- Eglais, Gustav E., see Ridgely, Beverly S., and
- Egret, Great, 49-61
- Eguiarte, Luis E., and Carlos Martínez del Rio, Feeding habits of the Citreoline Tropic in a tropical deciduous forest during the dry season, 872-874
- Ellis, Hugh I., see Pettit, Ted N., et al.
- Emberizidae, 556-573
- Emberizinae, 152-157
- Emlen, John T., Morphological correlates of synchronized nesting in a Tricolored Blackbird colony, 882-884
- Empidonax minimus*, 613-619
- E. oberholseri*, 25-36
- Emslie, Steven D., A new species of teal from the Pleistocene (Rancholabrean) of Wyoming, 201-204
- Endangered species, 377-382
- Environment, influence on Andean forest birds, 556-573; *Empidonax oberholseri*, 28-31; *Junco hyemalis*, 808-810, 813; *Lanius excubitorius*, 766-772; *Larus californicus*, 698, 699; *L. delawarensis*, 698, 699
- Environment, influence on breeding success, 777-778; clutch size, 632-634; egg volume, 788
- Erwin, R. Michael, review by, 662-663
- Escalante, Rodolfo, Catálogo de las aves Uruguayas. 3^a parte, Galliformes y Gruiformes (rev.), 427-428
- Eudyptes chrysocome*, 893-894
- E. chrysolophus*, 893-894
- Eulampis holosericeus*, 723-724
- Evans, Roger M., review by, 213-215
- Evolution, behavior, 444, 889-891; cooperative breeding, 754-765; flight, 97-101; hatching asynchrony, 781-790; hybridization, 1-13; plumage, 556-573; polychromatism, 701-710; song, 145-150; species, 82-94, 102-118
- Evolution of *Aechmophorus occidentalis*, 117-118; Anhingidae, 834-851; *Balaeniceps rex*, 845-849, 850; *Carduelis flammula*, 82-94; *C. hornemannii*, 82-94; *Coccycuza erythropthalmus*, 889-891; Fregatidae, 834-851; Pelecanidae, 834-851; Pelecaniformes, 834-851; Phaeothontidae, 834-851; Phalacrocoracidae, 834-851; Procellariiformes, 844; *Sphyrapicus nuchalis*, 1-13; *S. ruber*, 1-13; Sulidae, 834-851
- Falco columbarius*, 637-639
- Farrand, John, Jr. (Ed.), The Audubon Society master guide to birding (rev.), 226-228
- Fee, Christopher, The starling (rev.), 912-913
- Feathers (see Molts and plumages)
- Felton, Robert R., see Hayes, David J., et al.
- Ferner, Jean, review by, 241
- Ficken, Millicent S., Robert W. Ficken, and Karen M. Apel, Dialects in a call associated with pair interactions in the Black-capped Chickadee, 145-150
- Ficken, Robert W., see Ficken, Millicent S., et al.; see Popp, James W., et al.
- Finch, Cactus, 342-345; Darwin's, 342-345; House, 153, 643-644; Zebra, 647-650
- Fledgling, success of (see Breeding success)
- Flint, V. E., R. L. Boehme, Y. V. Kostin, and A. A. Kuznetsov; translated by Natalia Bourso-Leland, A field guide to birds of the USSR (rev.), 240
- Flood, Nancy J., Incidences of polygyny and extra-pair copulation in the Northern Oriole, 410-412
- Florida, 43-47
- Flowerpecker, Brown-backed, 606-612; Striped, 606-612; Thick-billed, 606-612
- Flycatcher, Dusky, 25-36; Great Crested, 745-747; Least, 613-619; Social, 873
- Food and feeding habits (see also Behavior, feeding) of *Amazona finschi*, 873; *Amblyornis macgregoriae*, 334-340; *Aratinga canicularis*, 873; *Archilochus colubris*, 722-725; *Cacicus melanicterus*, 873, 874; *Dendroica coronata*, 820-825; *Empidonax minimus*, 613-619; *Eulampis holosericeus*, 723-725; *Icterus pustulatus*, 873; *Melanerpes chrysogenys*, 873; *Myiozetetes similis*, 873; *Oceanodroma leucorhoa*, 884-885; *Ornithodoros poliocephala*, 873, 874; *Orthorhynchus cristatus*, 722-725; *Pandion haliaetus*, 479-490; *Pheucticus chrysopae*, 873; *Pitangus sulphuratus*, 873; *Salta tor coerulescens*, 873, 874; *Tachycineta bicolor*, 245-249; *Trochilidae*, 722-725; *Trogon citreolus*, 872-874; *Uria lomvia*, 727-734
- Foraging (see Behavior, feeding; Food and feeding habits)
- Ford, Norman L., review by, 675-676
- Formicariidae, 556-573
- Fossils of *Anas schneideri*, 201-204
- Fratercula arctica*, 293-296, 520-537
- F. cirrhata*, 520-537

- F. corniculata*, 520-537
Fregata minor, 838, 839, 841
 Fregatidae, 834-851
 Fritz, Robert S., Spruce Grouse in habitat patches in the Adirondack Mountains: dispersal vs. rarity, 393-394
 Fry, C. H., The bee-eaters (rev.), 421-422
Fulica americana, 133-143
 Fulmar, Southern, 540-548
 Furnariidae, 556-573
- Galapagos Islands, 342-345
 Gass, C. L., see Miller, Richard S., and ——
 Gaston, A. J., The diet of Thick-billed Murre chicks in the eastern Canadian Arctic, 727-734; Energy invested in reproduction by Thick-billed Murres (*Uria lomvia*), 447-456; review by, 911-912
 Gaunt, Abbot S., review by, 235-236
 Gauthreaux, Sidney A., Jr., see Kerlinger, Paul, and ——
Gavia stellata, 198-201
 Gavin, Thomas A., and Eric K. Bollinger, Multiple paternity in a territorial passerine: the Bobolink, 550-554
 Genetic variation in (see Genetics, genetic variation)
 Genetics, chromosome-banding techniques, 892-893; gene flow, 1-13; genetic variation, 305-311, 439-444, 550-554
 Genetics of *Cistothorus platyrhynchos*, 439-444; *Dolichonyx oryzivorus*, 550-554; *Grallina cyanoleuca*, 892; *Hirundapus caudacutus*, 892; *Melanerpes formicivorus*, 30s-311; *Ninox novaeseelandiae*, 892; *Podargus strigoides*, 892
 Geographic variation in *Aechmophorus occidentalis*, 102-118; *Carduelis flammea*, 82-94; *C. hornemannii*, 82-94; *Helianthus exortis*, 704-708; *Uria lomvia*, 727-734
 Geographic variation in molts and plumages, 704-708; vocalizations, 145-150, 439-444
Geospiza fortis, 342-345
G. scandens, 342-345
 Gettinger, R. D., W. W. Weathers, and K. A. Nagy, Energetics of free-living nestling House Finches: measurements with doubly labeled water, 643-644
 Giant-Petrel, Southern, 540-548
 Gill, Frank B., Hummingbird flight speeds, 97-101; J. P. Myers, Robert S. Ridgely, and Mark B. Robbins, review by, 226-228
 Gilles, R., see Balthazar, J., et al.
 Gillespie, Grant D., Hybridization, introgression, and morphometric differentiation between Mallard (*Anas platyrhynchos*) and Grey Duck (*Anas superciliosa*) in Otago, New Zealand, 459-467
 Giroux, Jean-François, Commentary: Dominance structuring of a Red-winged Blackbird roost: a comment, 900-901
 Glare, Daniel, and Daniel Magnenat, Oiseaux ni- cheurs de la haute vallée de l'Orbe (rev.), 916-917
 Gnatcatcher, Black-tailed, 120-130; Blue-gray, 120-130
Goldeneye, Barrow's, 389-390
 Goldfinch, American, 153
 Goose, Canada, 195-198
 Grackle, Boat-tailed, 43-47
 Grant, G. S., see Whittow, G. Causey, and ——
 Gratto, Cheri L., R. I. G. Morrison, and Fred Cooke, Philopatry, site tenacity, and mate fidelity in the Semipalmed Sandpiper, 16-23
 Graves, Gary R., Elevational correlates of speciation and interspecific geographic variation in plumage in Andean forest birds, 556-579
 Great Salvage Island, 391-392, 878-881
 Grebe, Western, 102-118, 635-637
 Grosbeak, Yellow, 873
 Gross, Barbara, see Lawrence, Susannah, and ——
 Ground-Finch, Medium, 342-345
 Grouse, Blue, 180-183, 313-321; Sage, 621-626; Spruce, 393-394
 Growth and development of *Coturnix japonica*, 323-332; *Sturnus vulgaris*, 369-375; *Zonotrichia leucophrys*, 783-784
Grus americana, 658-660
G. canadensis, 362-367
 Grzybowski, Joseph A., review by, 223-224; and Gary D. Schnell, Oklahoma ornithology. An annotated bibliography (rev.), 241
 Guillemot, Black, 293-296, 520-537; Pigeon, 520-537; Spectacled, 520-537
 Gull, California, 696-700; Herring, 827-833; Ring-billed, 38-41, 696-700, 827-833, 874-877
Gygis alba, 172-174
- Habitat of *Auriparus flaviceps*, 122-126; *Cardellina rubrifrons*, 122-126; *Dendragapus canadensis*, 393-394; *Dendroica coronata*, 122-126; *D. grisea*, 122-126; *D. nigrescens*, 122-126; *D. occidentalis*, 122-126; *D. petechia*, 122-126; *D. townsendi*, 122-126; *Emberiza*, 152-157; *Juncos hyemalis*, 806; *Lanius collaris*, 756-759, 761-764; *L. excubitorius*, 756-759, 761-764, 768; *Larus californicus*, 698; *L. delawarensis*, 698; *Myiochanes picta*, 122-126; *Oporornis tolmei*, 122-126; *Pezoceradramus taeniatus*, 122-126; *Polioptila caerulea*, 122-126; *P. melanura*, 122-126; *Psaltriparus minimus*, 122-126; *Regulus calendula*, 122-126; *R. satrapa*, 122-126; *Sturnus vulgaris*, 793-803; *Vermivora celata*, 122-126; *V. luciae*, 122-126; *V. ruficapilla*, 122-126; *V. virginiae*, 122-126; *Vireo bellii*, 122-126; *V. gilvus*, 122-126; *V. huttoni*, 122-126; *V. solitarius*, 122-126; *V. vicinior*, 122-126; *Wilsonia citrina*, 714-720; *W. pusilla*, 122-126
- Haftorn, Svein, and Randi Eidsmo Reinertsen, The effect of temperature and clutch size on the energetic cost of incubation in a free-living Blue Tit (*Parus caeruleus*), 470-477
 Hailman, Jack P., see Reed, Jonathan R., et al.
 Hainsworth, F. Reed, reviews by, 661-662, 910-911

- Haley, D. (Ed.), *Seabirds of eastern North Pacific and arctic waters* (rev.), 670-671
- Hamerstrom, Frances, *Birding with a purpose—of raptors, Gaboons, and other creatures* (rev.), 438; review by, 678-679
- Hamilton, Gary D., and Robert F. Martin, *Investigator perturbation and reproduction of the Cliff Swallow*, 167-170
- Hancock, James, and James Kushlan, *The herons handbook* (rev.), 909-910
- Haney, J. Christopher, *Commentary: Counting seabirds at sea from ships: comments on interstudy comparisons and methodological standardization*, 897-898
- Hanners, Lise A., see Southern, William E., et al.
- Hardy, John William, *Voices of the New World jays, crows, and their allies* (rev.), 433
- Harrier, Northern, 637-639
- Harris, M. P., *The puffin* (rev.), 911-912
- Harrison, Hal H., *Wood warblers' world* (rev.), 674-675
- Hartley, Alex H., see Craig, Adrian J. F. K., and
- Hatching, success of (see Breeding success)
- Hatching, timing of, 781-790
- Hawaii, 749-752
- Hawaiian, Broad-winged, 735-742; Red-tailed, 638
- Hayes, David J., Robert R. Felton, and Robert R. Cohen, *A natural occurrence of foster parenting by a female Mountain Bluebird*, 191-192
- Heintzelman, Donald S., *A guide to hawk watching in North America* (rev.), 905; review by, 665
- Heppner, Frank H., Jeffrey L. Convisar, Dennis E. Moonan, Jr., and John G. T. Anderson, *Visual angle and formation flight in Canada Geese (*Branta canadensis*)*, 195-198
- Hermit, Long-tailed, 97-101
- Hernandez, C., see De Vries, C., et al.
- Heron, Great Blue, 49-61
- Hickling, Ronald (Ed.), *Enjoying ornithology. A celebration of fifty years of the British Trust for Ornithology, 1933-1988* (rev.), 233-234
- Hinde, Robert A., review by, 668-669
- Hirundinidae, 556-573
- Hirundo pyrrhonota*, 167-170, 600-605
- Ho, M.-W., and P. T. Saunders (Eds.), *Beyond Neo-Darwinism* (rev.), 919-920
- Hoffman, Wayne, review by, 670-671
- Houston, C. Stuart (Ed.), *Arctic ordeal: the journal of John Richardson, surgeon-naturalist with Franklin, 1820-1822* (rev.), 904-905
- Hoysak, Drew J., see Weatherhead, Patrick J., and
- Hummingbird, 97-101, 175-178, 251-269; Antillean Crested, 722-725; Ruby-throated, 722-725
- Hurly, T. Andrew, and Raleigh J. Robertson, *Do female Red-winged Blackbirds limit harem size? I. A removal experiment*, 205-208
- Hussell, David J. T., *Clutch size, daylength, and sea-sonality of resources: comments on Ashmole's hypothesis*, 632-634
- Hutto, Richard L., *Seasonal changes in the habitat distribution of transient insectivorous birds in southeastern Arizona: competition mediated?*, 120-130
- Hybrids and hybridization of *Anas platyrhynchos* × *A. superciliosa*, 459-467; *Carduelis flammea flammea* × *C. hornemannii exilipes*, 82-94; *Sphyrapicus ruber daggetti* × *S. nuchalis*, 1-13
- Hylocichla mustelina*, 745-747
- Icteridae, 556-573
- Icterus galbula*, 410-412
- I. pustulatus*, 873
- Idaho, 193-195
- Incubation and incubation period of *Agelaius tricolor*, 882, 883; *Empidonax oberholseri*, 25-36; *Larus californicus*, 696-700; *L. delawarensis*, 696-700; *Zonotrichia leucophrys*, 783
- Iowa, 774-778
- Iverson, George C., see Krapu, Gary L., et al.
- Ixobrychus exilis*, 413
- I. "neoxenus,"* 413
- Jackson, J. A., see Wilbur, S. R., and —
- James, Paul C., and Hugh A. Robertson, *The calls of male and female Madeiran Storm-Petrels (*Oceanodroma castro*)*, 391-392; and Hugh A. Robertson, *The call of Bulwer's Petrel (*Bulweria bulwerii*)*, and the relationship between intersexual call divergence and aerial calling in the nocturnal Procellariiformes, 878-882
- Japan, 884-885
- Jay, Gray, 417-418; Steller's, 417-418
- Jellis, Rosemary, *Bird sounds and their meaning* (rev.), 437-438
- Jenkins, J. Mark, *The native forest birds of Guam* (rev.), 229-231
- Jenkinson, Marion Anne, and D. Scott Wood, *Avian anatomical specimens: a geographic analysis of needs*, 587-595
- Johnsgard, Paul A., *Cranes of the world* (rev.), 212-213
- Johnson, Carla Bowman, see Johnson, Ned K., and
- Johnson, Ned K., and Carla Bowman Johnson, *Speciation in sapsuckers (*Sphyrapicus*): II. Sympatry, hybridization, and mate preference in *S. ruber daggetti* and *S. nuchalis**, 1-13
- Johnston, Richard F. (Ed.), *Current ornithology*, vol. 1 (rev.), 663-664; review by, 217-218
- Jones, Peter Hope, see Tasker, Mark L., et al.
- Jonsson, L. (M. Beaman and J. Robertson, Eds.; translated by R. Littleboy), *Birds of the Mediterranean and Alps* (rev.), 237
- Junco, Dark-eyed, 153, 805-819
- Junco hyemalis*, 153, 805-819

- Karr, James R., review by, 228-229
- Keith, G. Stuart, In memoriam: Constantine Walter Benson, O.B.E., 162
- Kelly, John P., see Noon, Barry R., et al.
- Kent, Thomas H., see Dinsmore, James J., et al.
- Kenya, 754-764, 766-772
- Kerlinger, Paul, and Sidney A. Gauthreaux, Jr., Seasonal timing, geographic distribution, and flight behavior of Broad-winged Hawks during spring migration in south Texas: a radar and visual study, 735-743
- Kingbird, Cassin's, 654-657; Western, 654-657
- Kinglet, Golden-crowned, 120-130; Ruby-crowned, 120-130, 493-498
- Kiskadee, Great, 873
- Kite, Snail, 170-171
- Kleptoparasitism, 170-171, 637-639
- Klimstra, W. D., see Roseberry, J. L., and ——
- Koenig, Darwin, see Dinsmore, James J., et al.
- Koenig, Walter D., see Mumme, Ronald L., et al.
- Kostin, Y. V., see Flint, V. E., et al.
- Kovacs, Kit M., and John P. Ryder, Morphology and physiology of female-female pair members, 874-878
- Krapu, Gary L., George C. Iverson, Kenneth J. Reinecke, and Cheryl M. Boise, Fat deposition and usage by arctic-nesting Sandhill Cranes during spring, 362-367
- Krebs, J. R., and N. B. Davies (Eds.), Behavioral ecology: an evolutionary approach (2nd ed.) (rev.), 423-424
- Kroodsma, Donald E., reviews by, 433, 437-438, 912-913; and Richard A. Canady, Differences in repertoire size, singing behavior, and associated neuroanatomy among Marsh Wren populations have a genetic basis, 439-444
- Kulik, Stephen, Pete Salmansohn, Matthew Schmidt, and Heidi Welch, The Audubon Society field guide to the natural places of the northeast. Vol. 1, Coastal, and Vol. 2, Inland (rev.), 241
- Kushlan, James A., review by, 422-423; see Hancock, James, and ——
- Kuznetsov, A. A., see Flint, V. E., et al.
- Lack, Elizabeth, see Campbell, Bruce, and ——
- Lamarck, Jean Baptiste, Zoological philosophy (reprint) (rev.), 920
- Lamey, Timothy C., review by, 909-910
- Lanius collaris*, 754-764
- L. excubitorius*, 754-764, 766-772
- Lanyon, Wesley E., review by, 672
- Larus argentatus*, 827-833
- L. californicus*, 696-700
- L. delawarensis*, 38-41, 696-700, 827-833, 874-877
- Laurance, William F., and Eric Yensen, Rainfall and winter sparrow densities: a view from the northern Great Basin, 152-157
- Lawrence, Susannah, The Audubon Society field guide to the natural places of the mid-Atlantic states. Vol. 1, Coastal (rev.), 421; and Barbara Gross, Vol. 2, Inland (rev.), 241
- Leck, Charles F., The status and distribution of New Jersey's birds (rev.), 655
- Lefebvre, Louis, Stability of flock composition in urban pigeons, 886-888
- Lehmann, Val W., Bobwhites in the Rio Grande Plain of Texas (rev.), 673-674
- Lewis, Richard A., Do Blue Grouse form leks?, 180-183
- Lien, Jon, see Storey, Anne E., and ——
- Ligon, J. David, see Zack, Steve, and ——
- Limpkin, 170-171
- Littleboy, R., see Jonsson, L.
- Littlefield, Carroll D., review by, 212-213
- Lockwood, W. B., The Oxford book of British bird names (rev.), 916
- Locustella lanceolata*, 645
- Loesche, Patricia, see Beecher, Michael D., et al.
- Lohrer, Fred E., Editor of Recent Literature, 1A-47A, 1B-34B, 1C-34C, 1D-38D
- Longevity (see Mortality and survival)
- Longspur, Lapland, 687-693
- Loon, Red-throated, 198-201
- Love, John A., The return of the sea eagle (rev.), 218-219
- Lynch, James F., Eugene S. Morton, and Martha E. Van der Voort, Habitat segregation between the sexes of wintering Hooded Warblers (*Wilsonia citrina*), 714-721
- MacArthur, Robert H., Geographical ecology (reprint) (rev.), 437
- Mallard, 459-467
- Manakin, White-fronted, 384-387
- Manitoba, 16-23, 82-94, 133-143, 889-891
- Margarops fuscatus*, 281-291
- Mark, David M., Where to find birds in British Columbia (rev.), 665-666
- Marks, Henry L., see Ricklefs, Robert E., and ——
- Maron, J. L., and J. P. Myers, Seasonal changes in feeding success, activity patterns, and weights of nonbreeding Sanderlings (*Calidris alba*), 580-585
- Marshall, David B., see Reeves, Henry M., and ——
- Marten, Jill A., see Mumme, Ronald L., et al.
- Martin, Robert F., see Hamilton, Gary D., and ——
- Martinez del Rio, Carlos, see Eguiarte, Luis A., and ——
- Massachusetts, 479-490
- Massey, Barbara W., see Zembal, Richard, and ——
- Massey, Joseph A., Shogo Matsui, and six others, A field guide to the birds of Japan (rev.), 234-235
- Mating preference, 1-13, 16-23, 38-41, 305-311, 410-412
- Mating systems of *Calidris pusilla*, 16-23; *Centrocercus urophasianus*, 621-626; *Dendragapus obscurus*, 180-

- 183; *Dolichonyx oryzivorus*, 550-554; *Icterus galbula*, 410-412; *Melanerpes formicivorus*, 305-311; *Sphyrapicus nuchalis*, 1-13; *S. ruber*, 1-13; *Tachycineta bicolor*, 210-211
- Matsui, Shogo, see Massey, Joseph A., et al.
- Mattox, William E., see Burnham, William A., and ———
- McLaughlin, Robert L., and Robert D. Montgomerie, Brood division by Lapland Longspurs, 687-695
- McNeil, Raymond, Jose Ramón Rodriguez S., and Francine Mercier, Winter range expansion of the Long-billed Curlew (*Numenius americanus*) to South America, 174-175
- McWhirter, Doug, review by, 234-235
- Mead, Paul S., and Martin L. Morton, Hatching asynchrony in the Mountain White-crowned Sparrow (*Zonotrichia leucophrys oriantha*): a selected or incidental trait?, 781-792
- Measurements (see Weights and ———)
- Melanerpes chrysogenys*, 873
- M. formicivorus*, 305-311
- Memorials of Benson, Constantine Walter, O.B.E., 162; Blake, Charles Henry, 159-161; Gabrielson, Ira Noel, 865-868; Mudge, Edmund W., 869; Richdale, Launcelot Eric, 869; Stoner, Emerson A., 161
- Mendelsohn, J. M., and C. W. Sapsford (Eds.), Proceedings of the second symposium on African predatory birds (rev.), 905-906
- Meng, Heinz, review, 672-673
- Mercier, Francine, see McNeil, Raymond, et al.
- Merlin, 637-639
- Metabolism of tropical seabirds, 172-174
- Mewaldt, L. Richard, In memoriam: Emerson A. Stoner, 161
- Mexico, 102-118, 714-720, 872-874
- Meyer de Schauensee, Rodolphe, The birds of China (rev.), 431-432
- Michigan, 38-41, 827-833
- Migration and orientation, 120-130, 163-166, 735-742; altitudinal, 805-816; effects of weather on, 737-742; timing of, 737-739
- Migration and orientation of *Buteo platypterus*, 735-742, *Dendroica coronata*, 820-825; *Grus canadensis*, 362-367; *Junco hyemalis*, 805-812; *Numenius americanus*, 174-175
- Mikkola, Heimo, Owls of Europe (rev.), 238-239
- Miller, Bruce W., and Ronald L. Tilson, Snail Kite kleptoparasitism of Limpkins, 170-171
- Miller, Richard S., Why hummingbirds hover, 722-725; see Boyce, Mark S., and ———; and C. L. Cass, Survivorship in hummingbirds: is predation important?, 175-178
- Millington, Stephen J., and Trevor D. Price, Song inheritance and mating patterns in Darwin's finches, 342-345
- Mississippi, 820-825
- Molts and plumages of *Aechmophorus occidentalis*, 102-118; *Coccyzus erythrophthalmus*, 889; *Eudyptes chrysolophus*, 893-894; *E. chrysolophus*, 893-894; *Helian-*
- gelus exoris*, 701-710; *Trochilidae*, 701-710; *Wilsonia citrina*, 716, 718-719
- Momotidae, 556-573
- Montgomerie, Robert D., see McLaughlin, Robert L., and ———
- Moonan, Dennis E., Jr., see Heppner, Frank H., et al.
- Moorre, Frank R., review by, 915-916; and Patricia A. Simm, Migratory disposition and choice of diet by the Yellow-rumped Warbler (*Dendroica coronata*), 820-826
- Morgan-Jacobs, Deborah, see Clapp, Roger B., et al.
- Morrison, Douglas W., and Donald F. Caccamise, Ephemerally roosts and stable patches? A radiotelemetry study of communally roosting starlings, 793-804
- Morrison, R. I. G., see Gratto, Cheri L., et al.
- Mortality and survival of *Lanius collaris*, 759-760; *L. excubitorius*, 759-760; *Larus argentatus*, 827-833; *L. delawarensis*, 827-833; *Margarops fuscatus*, 270-279, 281-291; *Poephila guttata*, 647-650; *Procellariiformes*, 377-382; *Sturnus vulgaris*, 798; *Trochilidae*, 175-178; *Zonotrichia leucophrys*, 783-787
- Morton, Eugene S., see Lynch, James F., et al.
- Morton, Martin L., see Mead, Paul S., and ———; and Maria E. Pereyra, The regulation of egg temperatures and attentiveness patterns in the Dusky Flycatcher (*Empidonax oberholseri*), 25-36
- Mueller, Helmut C., review by, 218
- Mumme, Ronald L., Walter D. Koenig, Robert M. Zink, and Jill A. Marten, Genetic variation and parentage in a California population of Acorn Woodpeckers, 305-311
- Murre, Common, 293-296, 520-537; Thick-billed, 447-456, 520-537, 727-734
- Murrelet, Ancient, 520-537; Craven's, 520-537; Japanese, 520-537; Kittlitz's, 520-537; Marbled, 520-537; Xantus', 520-537
- Myers, J. P., review by, 663-664; see Gill, Frank B., et al.; see Maron, J. L., and ———
- Myiarchus crinitus*, 745-747
- Myioborus pictus*, 120-130
- Myiozetetes similis*, 873
- Nagy, Kenneth A., see Gettinger, R. D., et al.; see Williams, Joseph B., and ———
- Nebraska, 362-367
- Nero, Robert, Redwings (rev.), 228
- Nest and nest site of *Cacicus cela*, 506-518; *Calidris pusilla*, 16-23; *Charadrius alexandrinus*, 347-352; *Chlidonias niger*, 640-642; *Empidonax oberholseri*, 28-31; *Larus argentatus*, 827-833; *L. californicus*, 697, 698; *L. delawarensis*, 697, 698, 827-833; *Tachycineta bicolor*, 651-653; *Tyrannus verticalis*, 654-657; *T. vociferans*, 654-657; *Zenaida macroura*, 774-778
- Nestling of *Coccyzus erythrophthalmus*, 889
- Nettleship, David N., see Piatt, John F., and ———
- Nevada, 1-13
- Newfoundland, 293-296, 395-400
- New Jersey, 645-647, 793-803

- Newton, I., review by, 671-672
 New York, 439-444, 550-554, 645-647
 New Zealand, 459-467
 Nilsson, Sven G., review by, 238-239
 Nisbet, I. C. T., review by, 236-237
 Nitecki, Matthew H. (Ed.), *Extincions* (rev.), 429-431
 Noddy, Black, 172-174
 Noon, Barry R., Deanna K. Dawson, and John P. Kelly, A search for stability gradients in North American breeding bird communities, 64-79
 North Carolina, 805-816
 Northwest Territories, 82-94, 447-456, 687-693, 727-734
 Norway, 470-477
 Nuechterlein, Gary L., see Storer, Robert W., and ———
Numenius americanus, 174-175
- Obst, Bryan S., Densities of antarctic seabirds at sea and the presence of the krill *Euphausia superba*, 540-548
Oceanodroma castro, 377-382, 391-392
O. leucorhoa, 884-885
 O'Connor, Edmund F., see Ainley, David G., et al.
 O'Connor, Raymond J., The growth and development of birds (rev.), 908-909; review by, 424-426
 Oelke, Hans, review by, 237
 O'Neill, John P., review by, 427-428
 Ontario, 82-94, 205-208, 245-249, 298-304, 651-653, 722-725
Opornis tolmiei, 120-130
 Oregon, 1-13, 635-637, 696-700
 Orians, Gordon H., review by, 228
 Orientation (see Migration and ———)
 Oriole, Northern, 410-412; streak-backed, 873
Ornithes poliocephala, 873, 874
Orthorhyncus cristatus, 722-725
 Osprey, 479-490
 Ouellet, Henri, review by, 238
 Ovenbird, 745-747
 Owl, Long-eared, 193-195
- Page, Gary W., Lynne E. Stenzel, and Christine A. Ribic, Nest site selection and clutch predation in the Snowy Plover, 347-352
 Paleontology (see Fossils)
Pandion haliaetus, 479-490
 Papua New Guinea, 334-341
 Parakeet, Orange-fronted, 873
 Parasites (see Diseases and ———)
 Parasitism (see Kleptoparasitism)
 Parrot, Lilac-crowned, 873
 Parulidae, 556-573
Parus atricapillus, 145-150
P. bicolor, 184-186
P. caeruleus, 470-477
P. major, 870-871
Passerulus sandwichensis, 187-190
 Patton, Stephen R., see Southern, William E., et al.
- Paulson, Dennis R., The importance of open habitat to the occurrence of kleptoparasitism, 637-639
 Payne, Robert B., Sexual selection, lek and arena behavior, and sexual size dimorphism in birds (rev.), 231-233
 Pelecanidae, 834-851
 Pelecaniformes, 834-851
 Penguin, Adélie, 540-548; Macaroni, 893-894; Rock-hopper, 893-894
 Pepperberg, Irene M., Social modeling theory: a possible framework for understanding avian vocal learning, 854-864
 Pereyra, Maria E., see Morton, Martin L., and ———
Perisoreus canadensis, 417-418
 Peru, 506-518, 556-573
 Pesticides (see Pollutants)
 Petersen, Peter C., review by, 438; see Dinsmore, James J., et al.
 Petrel, Bonin, 172-174; Bulwer's, 172-174, 878-881; Cape, 540-548; Dark-rumped, 377-382
 Pettit, Ted N., Hugh I. Ellis, and G. Causey Whittow, Basal metabolic rate in tropical seabirds, 172-174
Peucedramus taeniatus, 120-130
Phaethon rubricauda, 172-174, 749-752, 838, 840, 841
 Phaethontidae, 834-851
Phaethornis superciliosus, 97-101
 Phalacrocoracidae, 834-851
 Phasianidae, 556-573
Pheucticus chrysopaeplus, 873
 Phylogeny of Alcidae, 520-537
 Physiology, egg-laying, 789-790, 882-883, 896; energy cost of activities, 43-47, 97-101, 133-143, 187-190, 401-405, 414-416, 447-456, 470-477, 493-498, 643-644; hormones, 876; incubation, 789-790, 882-883; migration, 820-825; molt, 102-118, 414-416, 690; nutrient reserves, 34, 133-143; temperature regulation, 25-36, 470-477; water loss from eggs, 749-752
 Physiology of *Agelaius tricolor*, 882-883; *Coturnix japonica*, 323-332; *Fulica americana*, 133-143; *Grus canadensis*, 362-367; *Larus delawarensis*, 875-876; *Sturnus vulgaris*, 369-375; *Zonotrichia leucophrys*, 414-416, 789-790
 Piatt, John F., and David N. Nettleship, Diving depths of four alcids, 293-296
 Picidae, 556-573
Picoides pubescens, 184-186
 Pigmentation of *Sphyrapicus nuchalis*, 4; *S. ruber*, 4; *Wilsonia citrina*, 716
Pirra serena, 384-387
 Pipidae, 556-573
Pitangus sulphuratus, 873
 Plover, Snowy, 347-352
 Plumages (see Molts and ———)
Podiceps clarkii, see *Aechmophorus occidentalis*
P. occidentalis, see *Aechmophorus occidentalis*
Poephila guttata, 647-650
Polioptila caerulea, 120-130

- P. melanura*, 120–130
 Pollutants, 49, 55–56, 117
 Polyandry (see Mating systems)
Polyborus planeus, 638
 Polygamy (see Mating systems)
 Polygyny (see Mating systems)
 Poole, Alan, Courtship feeding and Osprey reproduction, 479–490
 Popp, James W., Robert W. Ficken, and James A. Rehnartz, Short-term temporal avoidance of interspecific acoustic interference among forest birds, 744–748
 Powers, Kevin D., Pelagic distributions of marine birds off the northeastern United States (rev.), 662–663
 Powers, Leon R., see Craig, T. H., et al.
 Pratt, Helen M., and David W. Winkler, Clutch size, timing of laying, and reproductive success in a colony of Great Blue Herons and Great Egrets, 49–61
 Predation by antarctic seabirds, 540–548; *Calidris alba*, 580–585; *Daption ater*, 508; *Empidonax minimus*, 613–619; insectivores, 120–130; *Ramphastos cuvieri*, 508; *Tachycineta bicolor*, 245–249
 Predation on *Archilocheus alexandri*, 175–178; *A. columbris*, 175–178; *Ardeo herodias*, 50, 56–58; *Cacicus cela*, 506–518; *Calcarius lapponicus*, 693; *Calypte anna*, 175–178; *Casmerodus albus*, 50, 53, 56–58; *Charadrius alexandrinus*, 347–352; *Lanius collaris*, 760; *L. excubitorius*, 760, 770; *Larus argentatus*, 827–833; *L. delawarensis*, 827–833; *Parus atricapillus*, 184–186; *P. bicolor*, 184–186; *Picoides atricapillus*, 184–186; *Selasphorus rufus*, 175–178; *Sturnus vulgaris*, 798, 801; *Trochilidae*, 175–178; *Tyrannus verticalis*, 654–657; *T. vociferans*, 654–657; *Zenaida macroura*, 776–777; *Zonotrichia leucophrys*, 784, 786, 787
 Pregill, Gregory K., review by, 225–226
 Price, Frank E., and Carl E. Bock, Population ecology of the Dipper (*Cinclus mexicanus*) in the Front Range of Colorado (rev.), 666–667
 Price, Trevor D., see Millington, Stephen J., and Procellariiformes, 844–845
 Pröve, E., see Balthazart, J., et al.
 Pruett-Jones, M. A., and S. G. Pruett-Jones, Food caching in the tropical frugivore, MacGregor's Bowerbird (*Amblyornis macgregoriae*), 334–341
 Pruett-Jones, S. G., see Pruett-Jones, M. A., and Prum, Richard Owen, Observations of the White-fronted Manakin (*Pipra serena*) in Suriname, 384–387
Psaltriparus minimus, 120–130
 Psittacidae, 556–573
Pterodroma hypoleuca, 172–174
P. phaeopygia, 377–382
Ptychoramphus aleuticus, 520–537
 Puerto Rico, 270–279, 281–291
 Puffin, Atlantic, 293–296, 520–537; Horned, 520–537; Tufted, 520–537
Puffinus auricularis, 377–382
P. nativitatis, 172–174
P. pacificus, 172–174
P. puffinus, 395–400
 Quail, Japanese, 323–332
 Quebec, 82–94, 727–734, 886–888
 Quinney, Terry E., and C. Davison Ankney, Prey size selection by Tree Swallows, 245–249
Quiscalus major, 43–47
 Rabenold, Kerry N., and Patricia Parker Rabenold, Variation in altitudinal migration, winter segregation, and site tenacity in two subspecies of Dark-eyed Juncos in the southern Appalachians, 805–819
 Rabenold, Patricia Parker, see Rabenold, Kerry N., and —
 Radiation, solar, 33
 Rahn, Hermann, see Whittow, G. Causey, and —
 Raikow, Robert J., review by, 667–668
 Rail, Clapper, 179–180
Rallus longirostris, 179–180
 Ramphastidae, 556–573
Ramphastos cuvieri, 508
 Ratti, John T., A test of water depth niche partitioning by Western Grebe color morphs, 635–637
 Razorbill, 293–296, 520–537
 Redpoll, Common, 82–94; Hoary, 82–94
 Redstart, Painted, 120–130
 Reed, Jonathan R., John L. Sincock, and Jack P. Hailman, Light attraction in endangered procellariiform birds: reduction by shielding upward radiation, 377–382
 Reeves, Henry M., and David B. Marshall, In memoriam: Ira Noel Gabrielson, 865–868
Regulus calendula, 120–130, 493–498
R. satrapa, 120–130
 Reimchen, T. E., and Sheila Douglas, Differential contribution of the sexes to prefledged young in Red-throated Loons, 198–201
 Reinartz, James A., see Popp, James W., et al.
 Reinecke, Kenneth J., see Krapu, Gary L., et al.
 Reinertsen, Randi Eidsmo, see Haftorn, Svein, and —
 Research methods, effects on *Hirundo pyrrhonota*, 167–170; *Larus delawarensis*, 35–41; *Zenaida macroura*, 774–778
 Rhinocryptidae, 556–573
 Ribic, Christine A., see Page, Gary W., et al.
 Ricklefs, Robert E., and Henry L. Marks, Anatomical response to selection for four-week body mass in Japanese Quail, 323–332; and Tim Webb, Water content, thermogenesis, and growth rate of skeletal muscles in the European Starling, 369–375

- Ridgely, Beverly S., and Gustav E. Eglajs, Birds of the world in philately (rev.), 241
- Ridgely, Robert S., see Gill, Frank B., et al.
- Ripley, S. Dillon, see Ali, Salim, and —
- Robbins, Mark B., see Gill, Frank B., et al.
- Robertson, Hugh A., see James, Paul C., and —
- Robertson, J., see Jonsson, L.
- Robertson, Raleigh J., see Blancher, Peter J., and —; see Hurly, T. Andrew, and —; see Stutchbury, Bridget J., and —
- Robinson, Scott K., Coloniality in the Yellow-rumped Cacique as a defense against nest predators, 506–518
- Rodríguez, J. V., Aves del Parque Nacional Natural Los Katios, Choco, Colombia (rev.), 426–427
- Rodríguez S., Jose Ramón, see McNeil, Raymond, et al.
- Rogers, Christopher M., Foraging success and tree species use in the Least Flycatcher, 613–619
- Rogers-Price, Vivian, John Abbot in Georgia: the vision of a naturalist artist (1751–ca. 1840) (rev.), 914–915
- Rohwer, Frank C., The adaptive significance of clutch size in prairie ducks, 354–360
- Rønne, Gunnar, Ørnens dagbog (The eagle's diary) (rev.), 218–219
- Roosa, Dean M., see Dinsmore, James J., et al.
- Roseberry, J. L., review by, 673–674; and W. D. Klimstra, Population ecology of the Bobwhite (rev.), 221–222
- Rosthramus sociabilis*, 170–171
- Rotenberry, John T., see Wiens, John A., et al.
- Ryder, John P., reviews by, 222–223, 662; see Kovacs, Kit M., and —
- Sabine, Neil, reviews by, 665–666, 668
- Salmansohn, Pete, see Kulik, Stephen, et al.
- Salt, George A. (Ed.), Ecology and evolutionary biology (rev.), 679
- Saltator coerulescens*, 873, 874
- Saltator, Grayish, 873, 874
- Samson, Jack, Modern falconry: your illustrated guide to the art and sport of hunting with North American hawks (rev.), 672–673
- Sanderling, 580–585
- Sandpiper, Semipalmed, 16–23
- Sapsford, C. W., see Mendelsohn, J. M., and —
- Sapsucker, Red-breasted, 1–13; Red-naped, 1–13
- Saskatchewan, 362–367
- Saunders, P. T., see Ho, M.-W., and —
- Savard, Jean-Pierre L., Evidence of long-term pair bonds in Barrow's Goldeneye (*Bucephala islandica*), 389–390
- Schmidt, Matthew, see Kulik, Stephen, et al.
- Schmidt-Nielsen, Knut, Scaling: why is animal size so important? (rev.), 661–662
- Schnell, Gary D., see Grzybowski, Joseph A., and —; see Wood, D. Scott, and —
- Schone, Hermann, Spatial orientation (rev.), 915–916
- Schreiber, Ralph W., Tropical seabird biology (rev.), 420–421
- Sealy, Spencer G., Erect posture of the young Black-billed Cuckoo: an adaptation for early mobility in a nomadic species, 889–892
- Seiurus aurocapillus*, 745–747
- Sexual dimorphism of *Carduelis flammea*, 84–94; *C. hornemanni*, 84–94; *Gavia stellata*, 198–201; *Sphyrapicus nuchalis*, 7; *S. ruber*, 7
- Shearwater, Christmas, 172–174; Manx, 395–400; Newell's, 377–382; Wedge-tailed, 172–174
- Sheldon, Frederick H., The taxonomy and biogeography of the Thick-billed Flowerpecker complex in Borneo, 606–612
- Shrike, Common Fiscal, 754–764; Gray-backed Fiscal, 754–764
- Sialia currucoides*, 191–192
- Simberloff, Daniel, review by, 429–431; see Strong, Donald R., Jr., et al.
- Simm, Patricia A., see Moore, Frank R., and —
- Simmons, K. E. L., see Cramp, S., and —
- Simmons, Robert, Commentary: Did Tree Swallows cross a polygyny threshold?, 210–211
- Sincock, John L., see Reed, Jonathan R., et al.
- Siskin, Pine, 153
- Skua, South Polar, 540–548
- Smith, C. J., and W. J. Wolff (Eds.), Birds of the Wadden Sea (rev.), 238
- Smith, Kimberly G., reviews by, 917–918, 918–919
- Smith, Loren M., see Vangilder, Larry D., and —
- Smith, Susan M., review by, 674–675
- Snow, David W., review by, 231–233
- Social modeling theory, 854–860
- Song (see Vocalizations)
- South Africa, 893–894
- Southern, Linda K., and William E. Southern, Some effects of wing tags on breeding Ring-billed Gulls, 38–41; see Southern, William E., et al.
- Southern, William E., Editor of Book Reviews, 212–241, 420–438, 661–679, 904–920; Stephen R. Patton, Linda K. Southern, and Lise A. Hanners, Effects of nine years of fox predation on two species of breeding gulls, 827–833; see Southern, Linda K., and —
- Sparrow, Brewer's, 500–505; Sage, 500–505; Savannah, 187–190; White-crowned, 153, 414–416, 781–790
- Spectrograms of *Bulweria bulwerii*, 879; *Dendragapus obscurus*, 315; *Geospiza fortis*, 343; *Hirundo pyrrhonota*, 602, 603; *Oceanodroma castro*, 392; *Pipra serena*, 385; *Rallus longirostris*, 179
- Spedelow, Peter, Starvation of a flock of Chimney Swifts on a very small Caribbean island, 387–388
- Sphyrapicus nuchalis*, 1–13
- S. ruber*, 1–13
- Spizella breweri*, 500–505
- Starling, European, 369–375, 793–803
- Steganopodes, 842

- Stenzel, Lynne E., see Page, Gary W., et al.
- Sterna lunata*, 172-174
- Stoddard, Philip K., see Beecher, Michael D., et al.
- Storer, Robert W., and Gary L. Nuechterlein, An analysis of plumage and morphological characters of the two color forms of the Western Grebe (*Aechmophorus*), 102-118
- Storey, Anne E., and Jon Lien, Development of the first North American colony of Manx Shearwaters, 395-400
- Stork, Whale-headed, 845-849, 850
- Storm-Petrel, Band-rumped, 377-382; Leach's, 884-885; Madeiran, 391-392; Wilson's, 540-548
- Strauch, J. G., Jr., The phylogeny of the Alcidae, 520-537
- Strigidae, 556-573
- Strong, Donald R., Jr., Daniel Simberloff, Lawrence G. Abele, and Anne B. Thistle (Eds.), Ecological communities: conceptual issues and the evidence (rev.), 917-918
- Sturnidae, 629-632
- Sturnus vulgaris*, 369-375, 793-803
- Stutchbury, Bridget J., and Raleigh J. Robertson, Floating populations of female Tree Swallows, 651-653
- Sulidae, 834-851
- Sullivan, Kimberly, Selective alarm calling by Downy Woodpeckers in mixed-species flocks, 184-186
- Sunangel, Tourmaline, 701-710
- Suriname, 384-387
- Sutton, George Miksch, Fifty common birds of Oklahoma (rev.), 679
- Svensson, L., Identification guide to European passerines (rev.), 424-426
- Swallow, Cliff, 167-170, 600-605; Tree, 210-211, 245-249, 651-653
- Swan Islands, 387-388
- Swift, Chimney, 387-388
- Synthliboramus antiquus*, 520-537
- S. craveri*, 520-537
- S. hypoleucus*, 520-537
- S. wumizusume*, 520-537
- Tachycineta bicolor*, 210-211, 245-249, 651-653
- Tasker, Mark L., Peter Hope Jones, Barry F. Blake, and Tim J. Dixon, Commentary: Response to J. C. Haney, 899
- Taxonomy of *Aechmophorus occidentalis*, 102-118; *Balaeniceps rex*, 845-849; *Carduelis flammea*, 82-94; *C. hornemannii*, 82-94; *Dicaeum aeruginosum*, 606-612; *D. agile*, 606-612; *D. everetti*, 606-612; *Pelecaniformes*, 834-851; *Sphyrapicus nuchalis*, 1-13; *S. ruber*, 1-13; *Sturnidae*, 629-632
- Taylor, Kenneth, review by, 916
- Teal, Blue-winged, 354-360
- Teixeira, Dante Martins, and Herculano M. F. Alvarenga, The first recorded Cory's Bittern (*Ixobrychus "neoxenus"*) from South America, 413
- Telfair, Raymond Clark, II, The Cattle Egret: a Texas focus and world view (rev.), 422-423
- Temple, Stanley A. (Ed.), Bird conservation. 1 (rev.), 435-436
- Tern, Black, 640-642; Gray-backed, 172-174; White, 172-174
- Texas, 167-170, 735-742
- Thexton, Catherine M., Meadowlark music and other nature sounds (rev.), 672
- Thistle, Anne B., see Strong, Donald R., Jr., et al.
- Thomson, Tom, Birding in Ohio (rev.), 235-236
- Thrasher, Pearly-eyed, 270-279, 281-291
- Thrush, Wood, 745-747
- Tilson, Ronald L., see Miller, Bruce W., and —
- Tinamidae, 556-573
- Tit, Blue, 470-477; Great, 870-871
- Titmouse, Tufted, 184-186
- Tobish, Theodore G., Jr., The first record of *Locustella lanceolata* for North America, 645
- Tomback, Diana F., see Burnell, Kristi L., and —
- Toucan, Cuvier's, 508
- Tramer, Elliot J., review by, 666-667
- Trochilidae, 556-573, 722-725
- Troglodytidae, 556-573
- Trogon, Citreoline, 872-874
- Trogon citreolus*, 872-874
- Trogonidae, 556-573
- Trollope, Jeffrey, The care and breeding of seed-eating birds (rev.), 432-433
- Tropicbird, Red-tailed, 172-174, 749-752
- Troy, Declan M., A phenetic analysis of the redpolls *Carduelis flammea flammea* and *C. hornemannii exilipes*, 82-94
- Turdidae, 556-573
- Tyrannidae, 556-573
- Tyrannus verticalis*, 654-657
- T. vociferans*, 654-657
- Udvary, M. D. F., reviews by, 426-427
- Uniti, Philip, The birds of San Diego County (rev.), 677-678
- Uria aalge*, 293-296, 520-537
- U. lomvia*, 447-456, 520-537, 727-734
- Utah, 635-637
- Valerezo, S., Aves del Ecuador: sus nombres vulgares, vol. 1 (rev.), 427
- Van der Voort, Martha E., see Lynch, James F., et al.
- Vangilder, Larry D., and Loren M. Smith, Differential distribution of wintering Brant by necklace type, 645-647
- Van Horne, Beatrice, see Wiens, John A., et al.
- Venezuela, 174-175
- Verdin, 120-130
- Vermivora celata*, 120-130
- V. luciae*, 120-130
- V. ruficapilla*, 120-130
- V. virginiae*, 120-130

- Vireo bellii*, 120-130
V. gilvus, 120-130
V. huttoni, 120-130
V. solitarius, 120-130
V. vicinior, 120-130
 Vireo, Bell's, 120-130; Gray, 120-130; Hutton's, 120-130; Solitary, 120-130; Warbling, 120-130
 Vireonidae, 556-573
 Virgin Islands, 722-725
 Virginia, 645-647
 Vocalizations, geographic variation in, 145-150, 439-444; variety of, 879
 Vocalizations of *Bulweria bulwerii*, 878-881; *Cistothorus palustris*, 439-444; *Dendragapus obscurus*, 313-321; *Geospiza fortis*, 342-345; *G. scandens*, 342-345; *Hirundo pyrrhonota*, 600-605; *Oceanodroma castro*, 391-392; *Parus atricapillus*, 145-150, 184-186; *P. bicolor*, 184-186; *Picoides pubescens*, 184-186; *Pipra serena*, 384-386; *Rallus longirostris*, 179-180
 Vuilleumier, François, review by, 916-917
- Walkinshaw, Lawrence H., Kirtland's Warbler: the natural history of an endangered species (rev.), 675-676
 Wallace, Ian, Birds of prey of Britain and Europe (rev.), 218
 Warbler, Black-throated Gray, 120-130; Grace's, 120-130; Hermit, 120-130; Hooded, 714-720; Lanceolated, 645; Lucy's, 120-130; MacGillivray's, 120-130; Nashville, 120-130; Olive, 120-130; Orange-crowned, 120-130; Red-faced, 120-130; Townsend's, 120-130, 493-498; Virginia's, 120-130; Wilson's, 120-130; Yellow, 120-130; Yellow-rumped, 120-130, 493-498, 820-825
 Warham, John, In memoriam: Launcelot Eric Richdale, 869
 Washington, 313-321, 414-416, 600-605, 696-700
 Wasser, Samuel K. (Ed.), Social behavior of female vertebrates (rev.), 906-907
 Watanuki, Yutaka, Food of breeding Leach's Storm Petrels (*Oceanodroma leucorhoa*), 884-886
 Weather, influence on (see Environment, influence on)
 Weatherhead, Patrick J., Sex ratios of Red-winged Blackbirds by egg size and laying sequence, 298-304; and Drew J. Hoysak, Commentary: Response to J.-F. Giroux, 901-902
 Weathers, Wesley W., Birds of southern California's Deep Canyon (rev.), 436-437; see Gettinger, R. D., et al.
 Webb, Tim, see Ricklefs, Robert E., and ———
 Weights and measurements of *Calidris alba*, 580-585; *Dicaeum agile*, 609; *D. everetti*, 609
 Weis, Arthur E., review by, 434-435
 Welch, Heidi, see Kuik, Stephen, et al.
 Westmoreland, David, and Louis B. Best, The effect of disturbance on Mourning Dove nesting success, 774-780
 White, Clayton M., reviews by, 905, 905-906
 Whittow, G. Causey, and G. S. Grant, Water loss and pipping sequence in the eggs of the Red-tailed Tropicbird (*Phaethon rubricauda*), 749-753; see Pettit, Ted N., et al.; and Hermann Rahn (Eds.), Seabird energetics (rev.), 910-911
 Wiens, John A., reviews by, 240-241, 437; John T. Rotenberry, and Beatrice Van Horne, Territory size variations in shrubsteppe birds, 500-505
 Wilbur, S. R., and J. A. Jackson (Eds.), Vulture biology and management (rev.), 671-672
 Williams, Joseph B., and Kenneth A. Nagy, Daily energy expenditure by female Savannah Sparrows feeding nestlings, 187-190
 Williams, Timothy C., Annual bird migration over the windward Caribbean islands, 163-166
 Willson, Mary F., Vertebrate natural history (rev.), 918-919
Wilsonia citrina, 714-720
W. pusilla, 120-130
 Wiltschko, Wolfgang, review by, 239-240
 Wingfield, John C., review by, 219-220
 Winkler, David W., see Pratt, Helen M., and ———
 Wisconsin, 145-150, 613-619, 744-748
 Wolff, W. J., see Smith, C. J., and ———
 Wong, Marina, review by, 431-432
 Wood, D. Scott, and Marion Anne Jenkins (Eds.), World inventory of avian anatomical specimens: geographical analysis (rev.), 438; see Jenkins, Marion Anne, and ———; and Gary D. Schnell, Distributions of Oklahoma birds (rev.), 223-224
 Woodpecker, Acorn, 305-311; Downy, 184-186; Golden-cheeked, 873
 Wood-Pewee, Eastern, 745-747
 Wren, Marsh, 439-444
 Yensen, Eric, see Laurance, William F., and ———
 Zack, Steve, review by, 421-422; and J. David Ligon, Cooperative breeding in *Lanius* shrikes. I. Habitat and demography of two sympatric species, 754-765; and J. David Ligon, II. Maintenance of group-living in a nonsaturated habitat, 766-773
 Zembal, Richard, and Barbara W. Massey, Function of a rail "mystery" call, 179-180
Zenaida macroura, 774-778
 Zink, Robert M., review by, 913-914; see Mumme, Ronald L., et al.
Zonotrichia leucophrys, 153, 414-416, 781-790

